I. Introduction

The ACEC / Caltrans Division of Engineering Services (DES) Structures Liaison Committee (the Committee) was formed in 1992 with the primary purpose of maintaining a professional working relationship between Caltrans DES and ACEC member firms that perform engineering services for transportation structure projects. The Committee Charter requires that an Annual Report on Committee activities be prepared each calendar year.

II. Committee Meeting Dates

During the 2023 calendar year, the Committee met on the following dates:

- February 03, 2023
- May 12, 2023
- August 11, 2023
- November 03, 2023

This year the Committee discussed going back to in-person meetings with sites setup in Sacramento (FMP-1) and Southern California (Caltrans Diamond Bar Office) as many Committee members prefer in-person meetings. The February meeting was held similarly to the previous year, where meetings were held virtually via Microsoft Teams (due to COVID). Though the meeting attendance continued to be high virtually, the Committee agreed to hold an "in-person" only meeting in May. The meeting attendance was higher than pre-pandemic meetings, however the Committee agreed that a hybrid format of in-person and virtual would be tried for the August meeting. The hybrid format worked well and was subsequently implemented for future meetings. Meeting minutes were prepared by the Committee Secretary and reviewed by DES for compliance with Caltrans ADA accessibility requirements. Subsequently the meeting minutes were posted to the Caltrans OSFP-SLA website.

Besides the regular meetings, the core committee also held pre-meeting conference calls to review and discuss the agenda and technical discussion topics, and to ensure appropriate staff attend the meetings.

III. Committee Members

DES staff had strong representation and attended on a regular basis. Ruth Fernandes served as Committee Co-chair with Lance Schrey serving as coordinator between ACEC and Caltrans Committee members. Caltrans' usual attendees included Tom Ostrom, Sudhakar Vatti, Shira Rajendra, Sid Pedaballi, Lance Schrey, Rich Foley, Tim Greutert, Jason Chou, Robert Peterson, Don Nguyen-Tan and Nina Choy. Several guest speakers attended to address specific technical

agenda topics. As a result of retirements there were many changes in Caltrans representatives throughout the year and that will be noted in meetings going into 2024.

The seven regular members from ACEC were:

- Member 1: Districts 1-3, 9 & 10 Mark Reno, Consor
- Member 2: District 11 Jack Abcarius, NV5
- Member 3: District 4 Garrett Dekker, Moffatt & Nichol
- Member 4: Districts 7, 8 and 12 Y. Michael Van Duyn, HNTB
- Member 5: Districts 5 & 6 Bobby Zermeno, Cornerstone Structural Engineering
- Member 6 (CM&I): Districts 1-6 & 9-10 Hank Doll, Mark Thomas
- Member 7 (CM&I): Districts 7-8 & 11-12 Jon Rohrer, HDR.

For the 2023 meetings, the ACEC Committee Co-Chair was Mark Reno, and the Committee Secretary was Hank Doll. For the last meeting of 2023, Hank Doll had changed jobs and responsibilities, so Garrett Dekker was the Committee Secretary from October 2023 on. Hank Doll will be stepping off the Committee, as a result going into 2024 Garrett Dekker will be the incoming ACEC Co-Chair.

IV. Major Topics

A standing agenda with recurring topics was utilized and updated throughout the year. Modifications and additions to the standing agenda, including specific technical topics for each meeting, were made during the core Committee's pre-meeting conference calls. The standing agenda items included the following:

A. DES Updates

Caltrans reported throughout the year on the structures Capital Outlay Support (COS) workload, personnel changes, and other current news and events related to DES. Caltrans Organization Charts are now distributed with the quarterly meeting agendas for distribution.

Caltrans provided updates on anticipated funding changes for DES including specific funding figures associated with the Infrastructure Investment & Jobs Act (IIJA) as well as SB-1. Additionally, Caltrans provided regular updates to the group on how the increase in funding from IIJA would be split between the State and local agencies. Caltrans also announced their initiative to go fully electronic/digital for contract delivery in 5 years.

B. Technical: Structure Technical Policy (STP), Memo to Designers, Technical Research

Caltrans provided regular updates on various Caltrans Structure Technical Policies (STP) and Bridge Design Memos (BDM) that were either recently completed or in progress throughout the year. Caltrans announced that for projects under development, STP's and California Amendments must be adopted on all projects with a Type Selection approval on or after the date of publication. Caltrans also provided updates on topics of potential research, and research projects underway. Lastly, Caltrans clarified their previous position that bicycle railing had to be used on all Type 85 Barriers unless the roadway is explicitly signed to prohibit bicycle use. Instead, this safety-related issue will fall back to the Local Agency involved in terms of making this decision for bridges outside of state right of way.

C. Project Development Oversight / Contracting Opportunities

Caltrans kept the committee updated on upcoming contracting opportunities based on DPAC's Look-Ahead Report.

D. Local Assistance

Robert Peterson represented Caltrans Local Assistance throughout the year and provided regular updates to the Committee.

Robert Peterson or delegated staff gave updates with regards to the Bridge Investment Credit Program; Local seismic projects; changes and updates to the Bridge Formula Program (BFP) through the IIJA among other topics. New penalties and changes have been adopted for projects which do not meet their required schedules. Accountability for delivery and meeting the objectives of the overall program continue to get rolled out and shared with Local Agencies. The program continues to receive applications for new projects; however the programming of projects still follows the prescribed implementation schedule.

E. ACEC Statewide Committee Report

Garrett Dekker, an ACEC committee member who serves on the Statewide Committee, provided updates on issues being discussed in the bi-monthly ACEC / Caltrans Headquarters Liaison Committee meetings. Primary discussion topics during 2023 were consultant escalation rates, use of junior staff on Caltrans contracts, and use of a consultant resident engineer on Caltrans construction contracts.

F. Construction Management and Inspection Updates

Caltrans and ACEC reported throughout the year on various construction management and inspection related topics including staffing, workload, prevailing wage rates, indirect cost rates, Caltrans audits, and training of inspection staff. Discussions related to classifications, experience

and educational requirements aimed at keeping the experienced staff available and creating more opportunities for junior staff such as Techs and EIT's. Caltrans also continued discussions regarding varying RFQ requirements for staffing as it pertains to the use of "technician" and "interns" or junior engineering classification.

Caltrans and ACEC also coordinated to put on the traditional Winter Training Session on "Structure Concrete" for the consultant and Local Agency community. The session was a full 8hours and was very well attended by consultants and local agency staff.

G. Sub-Committee Updates

The Accelerated Bridge Construction (ABC) Sub-Committee, led by Garrett Dekker & Habib Hotaki, continued to coordinate and collaborate with Caltrans on the latest developments and implementation. This Sub-Committee continued the planning efforts leading up to the in-person workshop that is scheduled for March 2024.

The CMGC/Design-Build Sub-Committee led by Mark Reno and Jason Chou, scheduled, planned and hosted an in-person only "*CMGC Projects in California – Structure Focus*" Workshop in Sacramento on October 20, 2023. Following this successful workshop, this Sub-Committee proposed and received approval from the group to rename it to the "Alternative Project Delivery Methods" Sub-Committee. As Caltrans and the Local Agencies look towards "Progressive Design Build" following the recent legislation, there may be the opportunity to host a similar workshop on this topic in 2024/2025.

The Building Information Model (BIM) Sub-Committee, led by Bobby Zermeno and Doug Dunrud continued to coordinate closely with Caltrans. ACEC and Caltrans internal Bridge Design BIM Committee led by Mina Pezeshpour and Elias Kurani, combined to put on the 2nd Annual ACEC/Caltrans DES Joint BIM Webinar. ACEC also supported Caltrans in soliciting industry input through a coordinated survey which aimed to capture the state of BIM implementation among bridge consultants as well as the challenges in the area of BIM adoption. collected a vast amount of information for Caltrans.

A Technical Sub-Committee consultant panel assigned to review of Structure Technical Policy (STP) 2.6 – Hydraulic Design for Structures over Waterways that replaced MTD 16-1 continued coordination efforts with Caltrans Office of Technical Policy and Guidance (OTPG), Headquarters Local Assistance and Structures Hydraulics & Hydrology. These efforts continued from the previous year and remain focused on bridge scour at abutments. The Technical Sub-Committee received 14 questions from consultants in 2023. Questions and answers were shared at quarterly meetings and were also compiled into a single pdf package that was distributed to consultants with the November 2023 meeting minutes.

The Education Sub-Committee worked with the Caltrans DES Education Committee to enable Consultants to be able to virtually attend their presentations starting in 2024. The Sub-

Committee also worked with Caltrans, so Consultant participation is included in the 100-year bridge department anniversary celebration.

V. Significant Accomplishments

The Committee transitioned from a full virtual format, to an in-person only meeting and finally settling on a hybrid version for the meetings. Overall participation still remains high, with those that are participating in the in-person format enjoying the ability to get together again. There are some webinars that remain virtual, however many of the workshops and trainings have returned to in-person format. The Committee will continue to monitor and track the effectiveness of the various formats and make recommendations moving forward. For those events where an interactive question, panel discussion are desired, the Committee has determined that an in-person format is more effective. The following describes some of the major accomplishments of the Committee in 2023.

2023 will be remembered as the year of "*Significant Storm-Damage*". Caltrans as well as many Local Agencies, suffered significant storm-damage starting in January which continued well into February. ACEC took the lead in developing an information sharing regarding various types and examples of Local Agency storm-damage projects, and Caltrans followed suit presenting findings on several Caltrans projects. This was another strong example of the benefit of this committee and the ability to share and distribute important information.

Following the COVID-19 pandemic years, this year finally brought the return of the in-person Winter Training Sessions that Caltrans holds for the consultant and local agency community. In 2023, the Caltrans trainers were situated in the Translab along with a just over 40 attendees. Overall, there were just over 120 total attendees for the topic of "Structural Concrete". The Committee received positive feedback from those in attendance.

The "*CMGC Projects in California – Structure Focus*" In-Person Workshop took place at the Capital Event Center in Sacramento on 1020 11th St, Sacramento, CA 95814. The fees to cover the facility, audio visual equipment, provide both welcome breakfast and mid-day snacks and drinks were provided by Consultant firms. The format included presentations from Caltrans/Contractor Teams as well as Consultant/Contractor Teams followed by an interactive panel discussion involving all of the presenters. This workshop, which had over 135 people in attendance, included the following:

- 9 different Contractor Companies
- 9 different Local Agencies as well as DWR
- 22 different Consultant Firms
- 38 Caltrans Personnel from various Departments.

The feedback from all the participants and attendees was very favorable and has spurred many follow-up discussions on lessons learned and best practices.

The 2nd Annual ACEC/Caltrans Joint BIM Webinar was held on November 17th and was attended by over 60 participants. The participants were from privately owned design firms, local agencies, Caltrans, the California Department of Water Resources and the California High Speed Rail Authority. As part of the presentation, Caltrans provided an update on their own internal BIM efforts including various pilot projects and their overall vision for BIM. ACEC contributed by providing presentations covering the use of BIM on the Interstate Bridge Project, the use of BIM on the California High Speed Rail Madera to Merced Segment Project, and Model Based Delivery Challenges Previously Encountered by other DOT's and how they were overcome.

The Committee assisted in informing the Local Agencies as well as consultant community of the Implementation of the new annual Standard Plans and Specifications which came into effect on July of 2023. Caltrans has gone to annual update format and will no longer be producing and distributing hard-copies of their Standards. Now there still seems to be confusion and concern regarding the implementation memo for the new Standards. Often Local Agency projects are completed and "shelf ready" pending approved funding. Requiring Local Agencies to continue to update Standard Plans and Specifications to the latest version while waiting for funding, could have significant cost impacts to projects. Caltrans has informed the Committee that more information will be provided regarding the implementation.

During 2023, the ACEC Hydraulic Sub-Committee worked with Caltrans to develop STP 2.6 – Hydraulic Design for Structures over Waterways. While some progress was made, the proposed 10th Edition of AASHTO LRFD Bridge Design Specifications have caused some internal Caltrans discussions and STP modifications. The ACEC Hydraulic Sub-Committee looks forward to reviewing the document so it may be finalized and distributed in the coming year. This committee continues to be a good representation of how ACEC and Caltrans can effectively address complex issues affecting the bridge design community in seeking acceptable solutions that work for all parties.

VI. Future Plans (for the Coming Year)

The Committee will continue to work collaboratively on technical issues, project development oversight, and education. The following education/training events are anticipated in 2024:

- DES Education Committee Presentations
- Accelerated Bridge Construction (ABC) Workshop March 2024
- Structures Construction Winter Training Spring 2024
- Caltrans BIM Infrastructure Summit (with ACEC support) Spring 2024
- ACEC support and participation in the 100th Anniversary of Caltrans's Bridge Department Celebration

VII. Closing Statement

2023 was a year in which as an industry we saw a large shift back to returning to the office, while others continue a blend of in-office and remote work, and those who continued to work remotely full-time. As such the ACEC/Caltrans DES Structures Liaison Committee also shifted to a hybrid platform with many people enjoying the in-person interaction of the meetings. This Committee continued to fulfill its core mission of providing a platform for interaction between Caltrans and the consultant community on subjects and issues related to bridge and structure design and construction while operating in a hybrid environment. The quarterly meetings continued to be well attended with the combination of virtual and in-person attendees. In its current format, the Committee continues to serve as an effective interface between DES and the ACEC design and construction management and inspection community. The Committee did discuss possibly adding representation from the Geotechnical Committee, but instead decided to focus on first bringing subject specific matter to the quarterly meetings to see if there was interest and involvement from the Geotechnical community.

Prepared By:

Mark Reno, Committee Co-Chair